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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/714,891	11/18/2003	Hidetaka Osawa	03280088US	2810								
7590 McGuireWoods LLP Suite 1800 1750 Tysons Boulevard Tysons Corner McLean, VA 22102-4215		08/09/2007	<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">NAGPAUL, JYOTI</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>1743</td><td></td></tr></table>		EXAMINER		NAGPAUL, JYOTI		ART UNIT	PAPER NUMBER	1743	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/714,891

Applicant(s)

OSAWA ET AL.

Examiner

Jyoti Nagpaul

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1 and 7** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. With respect to Claim 1, applicant recites, "time measuring means for measuring time starting from dripping the reagent into selected wells on the microplate by the expelling operation performed by the dispensing head". Does applicant mean that the time is measured at the start of when the dispensing head dispenses the reagent to the end of the dispensing operation into the well? This recitation is unclear. Clarification is needed.

4. With respect to Claim 7, applicant recites, "self-diagnosing means for stimulating time to execute the one ore more processes to be executed by the dispensing head and determining whether the one or more processes are executable in the time set by the time setting means." It is unclear as to what "stimulating time" means. It is unclear as to what the applicant referring to in claim. The claim language is unclear and vague. It is unclear as to what the time setting means is.

5. Additionally, claim 7 recites the limitation "the time setting means". There is insufficient antecedent basis for this limitation in the claim. Clarification is needed.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 1-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano (US 6006800) in view of Akong (US 5670113).

Nakano teaches an automated liquid handling system. The system comprises a dispensing tip container (2) having a plurality of holding portions for holding a plurality of dispensing tips (44) and a dispensing head (21) having attachment portions (see Figures 2 and 3) for attaching at least one dispensing tip (44) selected from the plurality of dispensing tips (44). The dispensing head (21) is capable of performing sucking and expelling operations for sucking liquid in or expelling liquid out from the one or more dispensing tips (44). The system further comprises moving means (11) for moving the dispensing head (21) and a reagent container (3) that holds at least one reagent. The system further comprises a microplate (4) with a plurality of wells for holding specimen.

Nakano fails to teach a control device that controls the sucking and expelling operations performed by the dispensing head and controls the moving means to control movements of the dispensing head. Nakano also fails to teach the control device having input means for inputting one or more processes to be executed by the dispensing head. Nakano fails to teach time measuring means for measuring time starting from dripping the reagent into selected wells on the microplate by the expelling operation performed by the expelling operation performed by the dispensing head. Nakano fails to teach time measuring means comprises a plurality of times, each of the plurality of timers being provided for each of the rows and each of the columns of the plurality of wells for enabling measurement of time on a row or a column basis. Nakano further fails to teach the control device wherein the control device performs the expelling operation to drip another reagent into selected wells of the microplate when the time measuring means has measured a predetermined period of time. Nakano further fails

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to teach self-diagnosing means for simulating time to execute the one or more processes are executable in the time set by the time setting means wherein the self diagnosing means comprises informing means for informing an operator of a result of determination.

Akong teaches an automated measurement apparatus. The apparatus comprises a pipette controller (139) that receives set up commands from a microcomputer/time measuring means (90) at the beginning of an assay operation. The pipette controller also moves the pipette to individually deliver a specific reagent to a specific well. (See Col. 4, Lines 22-40) Akong further teaches upon completion of reagent addition by the pipette a reagent time stamp is stored in the data rerecord for each of the assayed wells. (See Col. 13, Lines 40-67) The system of Akong provides skilled researchers and technicians to conduct and record the results of individual assays. Akong further teaches per-well data files are then closed in a block (283) and a block (285) is performed to identify if the test as defined in the input parameters has been completed. In one example, Akong teaches the tests or measurements are being provided for a column of wells. (See Col. 13, Lines 42-60) Akong further teaches a monitor screen/display that indicates the time measured by the time measuring means. (See Col. 14, Lines 14-18) Akong further teaches self -diagnosis means comprises informing means for informing an operator of a result of determination. Akong teaches human interaction or operator determines and inputs the test parameter values in the microcomputer (90). After the test parameter values have been established and then the automatic pipette is set-up to conduct the defined test. (See Col. 9, Lines 14-29)

It would have been obvious to one of ordinary skill in the art to provide a control device that includes time measuring means to improve and upgrade the dispensing head of Nakano as taught by Akong for the predictable result of efficiency between delivery of more than one or more wells being assayed and thus increasing the efficiency of the overall process.

It would have been obvious to one of ordinary skill in the art to provide self-diagnosing means to improve and upgrade the dispensing head of Nakano as taught by Akong for the predictable result of efficiency between delivery of more than one or more wells being assayed and thus increasing the efficiency of the overall process.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Nagpaul whose telephone number is 571-272-1273. The examiner can normally be reached on Monday thru Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JN

  
Jill Warden  
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Technology Center 1700